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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET,NO.	CONFIRMATION NO.
10/791,820	03/04/2004	Naoto Watanabe	03500.017940	3654
5514 7590 FITZPATRICK CEI	01/05/2007 LLA HARPER & SCI	EXAMINER		
30 ROCKEFELLER PLAZA			BEAUCHAINE, MARK J	
NEW YORK, NY 10	0112		ART UNIT	PAPER NUMBER
	,		3653	
SHORTENED STATUTORY PER	IOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		01/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/791,820	WATANABE ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Mark J. Beauchaine	3653				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was period to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tire  11 apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 23 Oc	ctober 2006.					
,	action is non-final.					
,						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-6,16 and 17</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s): <u>1-6,16 and 17</u> is/are rejected.		•				
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
_						
9) The specification is objected to by the Examine		o by the Evaminer				
10) $\boxtimes$ The drawing(s) filed on <u>04 March 2004</u> is/are: a) $\boxtimes$ accepted or b) $\square$ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct						
11) The oath or declaration is objected to by the Ex	- · ·					
Priority under 35 U.S.C. § 119						
·	priority under 25 H C C \$ 110/o	(d) or (f)				
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of: 1.⊠ Certified copies of the priority documents have been received.						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau	•	·				
* See the attached detailed Office action for a list	• • • • • • • • • • • • • • • • • • • •	ed.				
Attachment(s)	_					
1) Notice of References Cited (PTO-892)	y (PTO-413) late					
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D 5)  Notice of Informal I					
Paper No(s)/Mail Date <u>7/17/06</u> . 6) Other:						

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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-6 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "sheet present" (claim 2, line 6; claim 3, line 5 and lines 6 and 7; claim 5, line 5 and lines 6 and 7; and claim 17, line 4) and "sheet absent" (claim 2, lines 6 and 7; claim 3, lines 5 and 6; claim 5, lines 5 and 6; and claim 17, line 4) are enclosed in parentheses and are thus ambiguous since it is unclear whether said terms are being claimed.

The term "second sensor" (claim 6, line 2) lacks sufficient antecedent basis.

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 6, 16 and 17 are rejected under 35 U.S.C. 102(a) as being anticipated by Patent Number US 6,494,453 B1 by Yamada et al ("Yamada"). The sheet stacking apparatus disclosed by Yamada comprises a first tray 1 on which sheets discharged from outlet E2 are stacked (see Figures 1 and 2), said first tray being movable between a stacking position at which the sheets discharged from the outlet are stacked and a first retracted position above the stacking position. Yamada further discloses second tray 2 on which sheets discharged from the outlet are stacked, said second tray being disposed below said first tray being movable between a stacking position at which the sheets discharged from the outlet are stacked when said first tray is at a first retracted position, and a second retracted position below the stacking position (column 14, lines 50-61).

Still further, Yamada discloses controller 102 that controls movement of said first tray and said second tray independently of each other, wherein when the sheets are to be stacked on said first tray, said controller stops descending movement of said second tray when a moving distance of said second tray reaches a predetermined distance, *i.e.*, the distance from sensor SN8 to outlet E2, (column 9, lines 26-33) which is set so that the top surface of the sheets stacked on said second tray does not interfere with said first tray which is at the stacking position. Sensor SN8 detects the sheets on said second tray wherein

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the predetermined distance is set to a distance of movement up to just before an output of said sensor changes from "sheet present" to "sheet absent".

After the moving distance of said second tray reaches the predetermined distance, said controller initiates an ascending movement of said second tray in response to a change of output of said sensor from "sheet present" to "sheet absent," and stops the ascending movement in response to a change of the output of said sensor from "sheet absent" to "sheet present" (column 16, lines 59-64).

When the moving distance of said second tray reaches the predetermined distance, said controller stops said second tray regardless of the output of said sensor (column 18, lines 47-59). Yamada further discloses second sensor SN9 that detects that said second tray has descended to reach a lower limit when the sheets are to be stacked onto said first tray (column 18, lines 32-46). When the moving distance of said second tray reaches the predetermined distance, said second tray is above the second retracted position.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada as applied to claim 2 above, and further in view of Patent Number 5,228,679 by Borostyan ("Borostyan"). Yamada fails to disclose an ascending movement of second tray 2 before the moving distance of said second tray reaches the predetermined distance. Borostyan teaches a sheet stacking apparatus comprising controller 96 and tray 114 that contains a stack of sheets. Controller 96 initiates an ascending movement of tray 114 before the moving distance of said tray reaches a predetermined distance (column 7, lines 55-69) for the purpose of stationing the upper surface of the stack of sheets at a predetermined location. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the ascending operation of Borostyan into the sheet stacking apparatus of Yamada for the purpose of stationing the upper surface of a stack of sheets at a predetermined location.

#### Response to Arguments

Applicant's arguments with respect to claims 1-6, 16 and 17 have been considered but are most in view of the new ground(s) of rejection.

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## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark J. Beauchaine whose telephone number is (571)272-6934. The examiner can normally be reached on 8:00AM through 5:00PM Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mjb

PATRICK MACKEY SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600